

BLAGOVESHCHENSKIY, V. V.

Opyty Primeneniya Kessona Dlya Prokhodki Shakht V Plyvunakh V Usldviyakh
Podmoskovnogo Besseyana I Stravneniye Yego S Drugimi Sposobami Gornyy Zhurnal
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Goryuchiye Slantsy #1934-35, TN .871
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BLAGOVESHCHENSKIY, V.V.

~~Blagoveshchenskiy, V.V.~~
Dynamics of flora on calcareous exposures of Mid-Volga region. Bot.
Zhur. 37, No.4, 442-457 '52. (MLRA 5:8)
(Biol.A 28 No.2:2790 '54)

BLAGOVESHCHENSKIY, V.V.

The common ash at the eastern limit of its distribution. Biol.
MOIP. Otd. biol. 59 no.4:41-49 JI-Ag '54. (MIRA 7:9)
(Ash (Tree))

BLAGOVESHCHENSKIY, V.V.

Interesting case of bulb formation in the inflorescence of onion.
Bot.shur. 41 no.8:1171-1172 Ag '56. (MLRA 9:12)

1. Ul'yanovskiy pedagogicheskiy institut.
(Onions)

BLAGOVESHCHENSKIY, V.V.

"Geography of cultivated plants" by S.I. Gluzdakov. Reviewed
by V.V. Blagoveshchenskiy. Geog. v shkole 23 no.5:91-92 S - 0
'60. (MIRA 13:9)
(Plants, Cultivated) (Gluzdakov, S.I.)

BLAGOVESHCHENSKIY, V.V.

Do ants help in plant pollination? Priroda 49 no.9:111 S '60.
(MIRA 13:10)

1. Ul'yanovskiy pedagogicheskiy institut.
(Fertilization of plants) (Ants)

BLAGOVESHCHENSKIY, V.V.

History of the pine forests of Volga Hills. Bot.zhur. 47
no.2:176-187 F '62. (MIRA 15:3)

1. Ul'yanovskiy gosudarstvennyy pedagogicheskiy institut.
(Volga Hills--Pine)

BLAGOVESHCHENSKIY, Viktor Vasil'yevich, kand. sel'khoz. nauk;
LEBEDEV, S., red.; SALAKHUTDINOVA, A., tekhn. red.

[Increase the productivity of farm animals] Povysit' produktivnost' sel'skokhoziaistvennykh zhiivotnykh. Tashkent, Gosizdat UzSSR, 1962. 42 p. (MIRA 16:5)
(Uzbekistan—Stock and stockbreeding)

BLAGOVESHCHENSKIY, V.V.

Sand steppes in the pine forest area of the Volga Hills. Bot. zhur.
49 no.1:52-62 Ja '64. (MIRA 17:2)

1. Ul'yanovskiy pedagogicheskiy institut.

BLAGOVESHCHENSKIY, V.V.

~~Bayevka tree.~~ Priroda 54 no.6:57 Je '65.

(MIRA 18:6)

1. Ul'anovskiy pedagogicheskiy institut.

БЛАГОВЕЩЕНСКИЙ В.П.

БАЙРАШЕВСКИЙ, Александр Мустафович; БЛАГОВЕЩЕНСКИЙ, В.П., инж.
спецредатор; ГОРЯНСКИЙ, Ю.В., ред.изд-ва; КОПЛЯКОВА, О.И.,
техн.ред.

[Marine radar] Sudovye radiolokatsionnye stantsii. Leningrad,
Izd-vo "Morskoi transport," 1957. 347 p. (MIRA 11:2)
(Radar in navigation)

BUKHANOVSKIY, Igor' Lavrent'yevich; Prinsipal uchastiye PLOTKO,
G.F., kand. tekhn. nauk; BLAGOVESHCHENSKIY, V.P.,
kand. tekhn. nauk, retsenzent; MESHKOV, O.I., red.

[Radar methods in navigation] Radiolokatsionnye metody
sudovozhdeniya. Moskva, Transport, 1964. 247 p.
(MIRA 18:1)

BLAGOVESHCHENSKIY, YU.N.

81873

S/166/60/000/03/02/011
C111/C222

16,6100

AUTHOR: Blagoveshchenskiy, Yu.N.

TITLE: On the Ergodicity for Schemes of Series of Markov Chains With Finitely Many States and a Discrete Time

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1960, No. 3, pp. 7 - 15

TEXT: Let P be a stochastic matrix of the order N , $S(P) = \max_{i,k} \sum_{j=1}^N |p_{ij} - p_{kj}|$

where p_{ij} are elements of P . Let $P(\lambda) = (\lambda - 1) \hat{P}(\lambda)$ be the characteristic polynomial and $\gamma(P) = \max_{\{P(\lambda)=0\}} |\lambda|$, $\delta(P) = 1 - \gamma(P)$.

If the sequence of matrices ${}_1P, {}_2P, \dots$ defines an inhomogeneous Markov chain,

then the principle of ergodicity of A.N. Kolmogorov (Ref. 3) is satisfied then and only then if $\lim_{n \rightarrow \infty} S({}_nP) = 0$, where ${}_nP = {}_1P \cdot {}_2P \cdot \dots \cdot {}_nP$.

Card 1/3

81873

On the Ergodicity for Schemes of Series
of Markov Chains With Finitely Many States
and a Discrete Time

S/166/60/000/03/02/011
G111/0222

Given a sequence of inhomogeneous Markov chains with N states, where the n -th chain has $m(n)$ instants ($m(n) \rightarrow \infty$ for $n \rightarrow \infty$). This sequence is called an inhomogeneous scheme of series. The scheme is called ergodic if $\lim_{n \rightarrow \infty} S(\bar{P}_n) = 0$ for $k = 1, 2, \dots$, where $\bar{P}_n = {}^1P_n \dots {}^{m(n)}P_n$ and

${}^1P_n, {}^2P_n, \dots, {}^{m(n)}P_n$ are the matrices defining the n -th Markov chain.

Theorem 3 : For the ergodicity it is sufficient that

$$(4) \quad \sum_{k=1}^{m(n)} \alpha({}_kP_n) \rightarrow \infty$$

holds for $n \rightarrow \infty$, where $\alpha(P) = \min_{i,k} \sum_{j=1}^N \min(p_{ij}, p_{kj})$.

In the homogeneous case, i.e. if ${}^1P_n = {}^2P_n = \dots = {}^{m(n)}P_n = P_n$ it is proved:

Theorem 1 : In order that

Card 2/3

4

81873

On the Ergodicity for Schemes of Series
of Markov Chains With Finitely Many States
and a Discrete Time

S/166/60/000/03/02/011
C111/C222

$$(2) \quad \lim_{n \rightarrow \infty} S(P_n^{m(n)}) = 0,$$

it is necessary and sufficient that

$$(3) \quad B(P_n) \cdot m(n) \rightarrow \infty \quad \text{for } n \rightarrow \infty.$$

The author mentions Kh. Rashidov and S.Kh. Sirazhdinov.
The paper contains numerous misprints.
There are 5 Soviet references.

ASSOCIATION: Institut matematiki imeni V.I. Romanovskogo AN Uz SSR
(Institute of Mathematics imeni V.I. Romanovskiy AS Uz SSR)

SUBMITTED: June 27, 1959

Card 3/3

16.6100

S/020/61/138/003/002/017
C111/0333

AUTHORS: Blagoveshchenskiy, Yu. N., Freydlin, M. J.

TITLE: Some properties of diffusion processes depending on a parameter

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 3, 1961, 508-511

TEXT: The authors consider the stochastic equation

$$x_t(\alpha, \omega) - x_s(\alpha, \omega) = \int_s^t \sigma(u, \alpha, x_u(\alpha, \omega)) d\tilde{f}_u(\omega) + \int_s^t m(u, \alpha, x_u(\alpha, \omega)) du \quad (1)$$

where $\tilde{f}_u(\omega) = (\tilde{f}_u^1(\omega), \tilde{f}_u^2(\omega), \dots, \tilde{f}_u^n(\omega))$ is an n -dimensional Wiener process defined in the probability space $(\Omega, \mathcal{M}, P)$; $\sigma(u, \alpha, x) =$

$= \{\sigma_{ij}^1(u, \alpha, x)\}_{i,j=1}^n$ -- matrix; $m(u, \alpha, x) = (m^1(u, \alpha, x), \dots, m^n(u, \alpha, x))$ ✓

Card 1/7

Some properties of diffusion ...

24030
S/020/61/138/003/002/017
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an n-dimensional vector. The integrals in (1) are stochastic integrals.

Theorem 1: Assume that there exists a constant $C < \infty$ such that for all $x, y \in R^n$; $\alpha, \beta \in A \subseteq R^m$; $u \in [0, T]$, $T < \infty$ it holds

$$\sum_{i,j=1}^n |\sigma_{ij}^1(u, \alpha, x) - \sigma_{ij}^1(u, \beta, y)| + \sum_{i=1}^n |m^i(u, \alpha, x) - m^i(u, \beta, y)| \leq C (\|\alpha - \beta\| + \|x - y\|)$$

where $\|z_1 - z_2\| = \left(\sum_{j=1}^k |z_1^j - z_2^j|^2 \right)^{1/2}$ for $z_i = (z_i^1, z_i^2, \dots, z_i^k)$.

Furthermore, let $x_0(\alpha, \omega)$ be continuous in $\alpha \in A$ for almost all ω .

Then there exists a random function $x_t(\alpha, \omega)$ which satisfies (1) and is continuous in $(t, \alpha) \in [0, T] \times A$ with probability 1.

Card 2/7

Some properties of diffusion ...

24030
S/020/61/138/003/002/017
C111/C333

Theorem 2: Assume that $\sigma_j^1(u, \alpha, x)$ and $m^1(u, \alpha, x)$ possess continuous bounded derivatives with respect to α_p, x^r ($i, j, r = 1, 2, \dots, n; p = 1, 2, \dots, m$) up to the order $k + 1$ inclusively. Assume that $x_0(\alpha, \omega)$ and $d^1 x_0(\alpha, \omega) / \partial \alpha_1^{l_1} \dots \partial \alpha_m^{l_m}$, $l_1 + l_2 + \dots + l_m = l \leq k + 1$ exist for almost all ω , are bounded and continuous. Then there exist continuous derivatives $\partial^1 x_t(\alpha, \omega) / \partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}$ in (t, ∞) for almost all ω and all $l_1 + l_2 + \dots + l_m = l \leq k$. If the existence of $d^1 x_0(\alpha, \omega) / \partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}$ is required only in the quadratic mean for all $l_1 + l_2 + \dots + l_m = l \leq k + 1$ and if the above requirements upon $\sigma(u, \alpha, x)$, $m(u, \alpha, x)$ are maintained, then $\partial^1 x_t(\alpha, \omega) / \partial \alpha_1^{l_1} \dots \partial \alpha_2^{l_2} \partial \alpha_m^{l_m}$ will exist also in the quadratic mean for all $l_1, l_2, \dots, l_m; l_1 + l_2 + \dots + l_m = l \leq k$.

Card 3/7

Some properties of diffusion . . .

24030
S/020/61/138/003/002/017
C111/C333

The random functions $\partial^1 x_t(\alpha, \omega) / \partial \alpha_1^{l_1} \dots \partial \alpha_n^{l_n}$, $l_1 + l_2 + \dots + l_m =$
 $= 1 \leq k$ satisfy the following system of stochastic equations

$$\frac{\partial^l x_t(\alpha, \omega)}{\partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}} = \frac{\partial^l x_0(\alpha, \omega)}{\partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}} +$$

$$+ \int_0^t \frac{\partial^l \sigma(u, \alpha, x_u(\alpha, \omega))}{\partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}} d\xi_u(\omega) + \int_0^t \frac{\partial^l m(u, \alpha, x_u(\alpha, \omega))}{\partial \alpha_1^{l_1} \partial \alpha_2^{l_2} \dots \partial \alpha_m^{l_m}} du. \quad (2)$$

Here it holds

$$\frac{\partial f(\alpha_1, \alpha_2, \dots, \alpha_m; x^1(\alpha), x^2(\alpha), \dots, x^n(\alpha))}{\partial \alpha_k} = \frac{\partial f}{\partial \alpha_k} +$$

Card 4/7

Some properties of diffusion ...

S/0207617138/003/002/017
C111/C333

$$+ \sum_{i=1}^n \frac{\partial f}{\partial x^i} \frac{\partial x^i}{\partial \alpha_k} ; \quad \frac{\tilde{\partial}^2 f}{\partial \alpha_i \partial \alpha_j} = \frac{\tilde{\partial}}{\partial \alpha_i} \left(\frac{\tilde{\partial} f}{\partial \alpha_j} \right)$$

From theorem 2 it follows

Theorem 3: Let $x_t^x(\omega)$ satisfy the stochastic equation

$$x_t^x(\omega) = x + \int_0^t \sigma(u, x_u^x(\omega)) d\beta_u(\omega) + \int_0^t m(u, x_u^x(\omega)) du \quad (3)$$

If then $\sigma(u, x)$, $m(u, x)$ have bounded continuous derivatives with respect to x^r , $r = 1, 2, \dots, n$, up to the order $k + 1$ inclusively, then there exist the derivatives $\partial^l x_t^x(\omega) / \partial (x^1)^{l_1} \dots \partial (x^n)^{l_n}$, $l_1 + l_2 + \dots + l_n = l$, for all $l \leq k$ and almost all ω . These derivatives exist also in the quadratic mean.

Card 5/7

24030
S/020/61/138/003/002/017
C111/C333

Some properties of diffusion . . .

Theorem 4: Let $x_t(\alpha, \omega)$ be a random function which satisfies (1), where the coefficients of (1) are assumed to have continuous, bounded partial derivatives up to the second order inclusively. Let denote: $\tau_D^{\alpha}(\omega) = \inf \{t : x_t(\alpha, \omega) \in D\}$, where D is a domain in R^n , the boundary of which Γ has a continuously rotating normal. If then $\det \{ \sigma_j^{\alpha}(t, x) \}_{j=1}^n \neq 0$ for $x \in \Gamma$ and $t \geq 0$, then with probability 1 it holds

$$\frac{\partial \tau_D^{\alpha}(\omega)}{\partial \alpha_i} = 0, \quad i = 1, 2, \dots, m$$

for all α except a certain set $\Lambda(\omega) \in R^m$ with Lebesgue measure zero.

For the proof of the theorems the authors use the following generalization of the well-known theorem of A. N. Kolmogorov:

Theorem: Let $x_{\mu}(\omega)$ be a separable random field defined for $\mu \in R^m$

Card 6/7

24030
S/020/61/138/003/002/017
C111/C333

Some properties of diffusion . . .

and which attains values from the n-dimensional Euclidean space R^n .
In order that $x_{\mu}(\omega)$ be continuous in μ with probability 1, it is
sufficient that for certain $\gamma > 0$ and $\epsilon > 0$ the inequality

$$M \| x_{\mu}(\omega) - x_{\mu'}(\omega) \|^\gamma \leq C \| \mu - \mu' \|^{m+\epsilon}$$

is satisfied.

J.V. Girsanov is mentioned in the paper. The authors thank Ye.B. Dynkin for the subject and advices.

There are 2 non-Soviet-bloc references. The reference to English-language publication reads as follows: J. Doob, Veroyatnostnyye protsessy [Stochastic processes], JL, 1956.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosov (Moscow State University imeni M.V.Lomonosov)

PRESENTED: January 21, 1961, by A. N. Kolmogorov, Academician

SUBMITTED: January 14, 1961

Card 7/7

25326

S/020/61/138/006/002/019
G111/G222

16.6100 16.3500

AUTHOR: Blagoveshchenskiy, Yu.N.

TITLE: Some theorems on diffusion processes with a small coefficient of diffusion and their applications to second order parabolic equations involving a small parameter

PERIODICAL: Akademiya nauk SSSR. Doklady, v.138, no.6, 1961, 1259-1262

TEXT: Let the random process $x(t, \varepsilon, \omega)$ satisfy the equation

$$x(t, \varepsilon, \omega) = x_0 + \int_0^t a(u, x(u, \varepsilon, \omega)) du + \varepsilon \int_0^t b(u, x(u, \varepsilon, \omega)) d\zeta(u, \omega), \quad (1)$$

where $u, t \in [0, T]$, $T < \infty$; $\varepsilon \in [0, \varepsilon_0]$, $\varepsilon_0 > 0$; $\zeta(u, \omega)$ is a Wiener process. Let

$$|a(u, x) - a(u, y)| + |b(u, x) - b(u, y)| \leq K|x - y|, \quad (2)$$

where $K < \infty$ is uniformly satisfied in u, x, y , $u \in [0, T]$, $x, y \in R = (-\infty, \infty)$. Let furthermore the m first partial derivatives of $a(u, x)$ with respect to x and the $(m-1)$ first partial derivatives of $b(u, x)$ with respect to x satisfy the Lipschitz condition.

In (Ref.2: Teoriya veroyatn. i yeye primenen., 6, v.3 (1961)) the author

Card 1/7

25326

Some theorems on diffusion processes...

S/020/61/138/006/002/019
C111/C222

proved that then

$$x(t, \xi, \omega) = x(t) + \xi x_1(t, \omega) + \dots + \xi^m x_m(t, \omega) + \xi^{m+1} x_{m+1}(t, \xi, \omega) \quad (3)$$

is valid, where $x(t)$ is a solution of

$$x(t) = x_0 + \int_0^t a(u, x(u)) du. \quad (4)$$

Let $x(t) = (x^1(t), x^2(t), \dots, x^n(t))$ be defined by (4). Let $C(t)$ denote the matrix $c(t, x(t))$, where $c(t, x) = b(t, x)b'(t, x)$ and b' is the transposed matrix of b . Let $A(t) = \left\{ \frac{\partial a^i(t, x)}{\partial x^j} \right\}_{i,j=1}^n \bigg|_{x=x(t)}$, and

$G(t) = \{g_j^i(t)\}_{i,j=1}^n$ be the matrix of the second moments of the process $x_1(t, \omega)$ (cf. (3)). It holds

$$\dot{G}(t) = A(t)G(t) + G(t)A(t) + C(t), \quad (5)$$

where $\dot{G}(t) = \left\{ \frac{d}{dt} g_j^i(t) \right\}_{i,j=1}^n$ and $g_j^i(0) = 0$. The rank of $G(t)$ is $\geq$ the rank of $C(t)$.
Card 2/7

25326

Some theorems on diffusion processes... S/020/61/138/006/002/019
C111/C222

Theorem 1: In order that there exists a non-degenerated matrix $Q(t)$ so that the distribution density $q^\varepsilon(t, x)$ of the process

$$y(t, \varepsilon, \omega) = \frac{1}{\varepsilon} Q(t) [x(t, \varepsilon, \omega) - x(t)]$$

has the form

$$q^\varepsilon(t, x) = \varphi_0(x) + \theta^\varepsilon(x, t), \quad |\theta^\varepsilon(t, x)| \leq K \varepsilon \ln^2 \frac{1}{\varepsilon}, \quad (6)$$

where $K < \infty$ uniformly in (x, ε) and $\varphi_0(x) = (2\pi)^{-n/2} \exp(-\frac{|x|^2}{2})$, it is necessary and sufficient that $\det [G(t)] \neq 0$.

Let $\det [G(t)] = 0$ for a $t > 0$ and let then the rank of $G(t)$ be $r > 0$. Then for this t it holds

$$x_1^i(t, \omega) = \sum_{j=1}^r d_j^i x_1^j(t, \omega) \quad \text{for } i=r+1, r+2, \dots, n.$$

Theorem 2: Let the determinant of the matrix of the second moments of the $(n+r)$ -dimensional process $(x_1^1(t, \omega), x_1^2(t, \omega), \dots, x_1^r(t, \omega), x_2^1(t, \omega), \dots, x_2^2(t, \omega), \dots, x_2^n(t, \omega))$ be different from zero. Then there exists a

Card 3/7

25326

Some theorems on diffusion processes... S/020/61/138/006/002/019
C111/C222

matrix $\tilde{Q}(t)$ so that the distribution density $\tilde{q}^\varepsilon(t, x)$ of the process

$\tilde{y}(t, \varepsilon) = \tilde{Q}(t)R(t, \varepsilon)[x(t, \varepsilon, \omega) - x(t)]$,
where

$$R(t, \varepsilon) = \begin{pmatrix} \frac{1}{\varepsilon} & 0 & \dots & 0 & 0 & \dots & 0 \\ 0 & \frac{1}{\varepsilon} & \dots & 0 & 0 & \dots & 0 \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & \dots & \frac{1}{\varepsilon} & 0 & \dots & 0 \\ \frac{1}{\varepsilon} d_1^{r+1} & \frac{1}{\varepsilon} d_2^{r+1} & \dots & \frac{1}{\varepsilon} d_r^{r+1} & \frac{1}{\varepsilon^2} & \dots & 0 \\ \frac{1}{\varepsilon} d_1^r & \frac{1}{\varepsilon} d_2^r & \dots & \frac{1}{\varepsilon} d_r^r & 0 & \dots & \frac{1}{\varepsilon^3} \end{pmatrix}.$$

has the form

$$\tilde{q}^\varepsilon(t, x) = \tilde{\varphi}_0(t, x) + \tilde{\theta}^\varepsilon(t, x), \quad |\tilde{\theta}^\varepsilon(t, x)| \leq K \varepsilon \ln^3 \frac{1}{\varepsilon}, \quad (7)$$

where $K < \infty$ uniformly in x, ε , and $\tilde{\varphi}_0(t, x)$ is the n -dimensional density of a certain non-degenerated law of distribution with vanishing mean

Card 4/7

25,26

Some theorems on diffusion processes...

S/020/61/138/006/002/019
C111/C222

values and a unit matrix of the second moments.

Let $P^\varepsilon(t, x_0, x) = \mathbb{P}\{x(t, \varepsilon, \omega) < x \mid x(0, \varepsilon, \omega) = x_0\}$ and $p^\varepsilon(t, x_0, x) = \frac{\partial}{\partial x} P^\varepsilon(t, x_0, x)$.

Theorem 3: Let the matrix $G(t)$ have the rank $r > 0$, and let the common distribution of the processes $(x_1^1(t, \omega), x_1^2(t, \omega), \dots, x_1^r(t, \omega), x_2^1(t, \omega), x_2^2(t, \omega), \dots, x_m^n(t, \omega))$ be non-degenerated (i.e. let the determinant of the corresponding matrix of the second moments be $\neq 0$). Then it holds

$$p^\varepsilon(t, x_0, x) = \frac{\psi_0^\varepsilon(t, x_0, x)}{\varepsilon^{2n-r}} + \frac{\psi_1^\varepsilon(t, x_0, x)}{\varepsilon^{2n-r-1}} + \dots + \frac{\psi_{m-2}^\varepsilon(t, x_0, x)}{\varepsilon^{2n-r-m+2}} + \frac{\tilde{\psi}_{m-1}^\varepsilon(t, x_0, x)}{\varepsilon^{2n-r-m+1}}, \quad (8)$$

where $|\tilde{\psi}_{m-1}^\varepsilon(t, x_0, x)| \leq K_{m-1} \ln^{m+1} \frac{1}{\varepsilon}$, $|\psi_i^\varepsilon(t, x_0, x)| \leq K_i$, $i=0, 1, \dots, m-2$, and $K_j < \infty$, $j=0, 1, \dots, m-1$ uniformly in x, ε .

The proofs of (6), (7) and (8) are based on the theorems:

Card 5/7

25386

Some theorems on diffusion processes...

S/020/61/138/006/002/019
C111/C222

Theorem 4: There exists an $\alpha_k > 0$ so that

$$M \exp \left\{ \alpha_k \sup_{0 \leq t \leq T} |x_k(t, \omega)|^2 \right\} < \infty. \quad (11)$$

For arbitrary $\kappa > 0$, $\mu > 0$ and a certain $t \in [0, T]$ there exist functions $a(u, x)$ and $b(u, x)$ with bounded partial derivatives with respect to x up to the order $(m+1)$ inclusively so that it holds

$$M \exp \left\{ \mu |x_k(t, \omega)|^{\frac{2}{k} + \kappa} \right\} < \infty. \quad (12)$$

Theorem 5: There exists a $\gamma_{m+1} > 0$ so that

$$M \exp \left\{ \gamma_{m+1} \sup_{0 \leq t \leq T} |x_{m+1}(t, \xi, \omega)|^{\frac{1}{m+1}} \right\} < K, \quad K < \infty \text{ uniformly in } \xi. \quad (13)$$

The proof of (11) and (13) is based on stochastic integral equations of (Ref.2), a formula due to Ito for stochastic integrals and some general assertions.

The author mentions Ye.K.Isakova. There are 2 Soviet-bloc and 2 non-Card 6/7

25326

Some theorems on diffusion processes...

S/020/61/138/006/002/019
C111/C222

Soviet-bloc references. The reference to the English-language publication reads as follows: J.L.Doob, Veroyatnostnye protsessy (Stochastic processes), IL, 1956.

PRESENTED: February 20, 1961, by A.N.Kolmogorov, Academician

SUBMITTED: February 16, 1961

Card 7/7

~~BLAGOVESHCHENSKIY~~
Transactions of the Sixth Conference (Cont.)

SOV/6371

20. Uzhdavinis, R. V. On the Problem of Distribution of Additive Arithmetical Functions of Integer Polynomials 125

MARKOV PROCESSES

21. Blagoveshchenskiy, Yu. N. On Diffusion Processes With a Small Variance 131
22. Girsanov, I. V. Ito's Stochastic Equations and Some of Their Generalizations 133
23. Kalmykov, G. I. On Semiordered Markov Processes 143
24. Nagayev, S. V. Some Problems of the Theory of Markov Processes With Discrete Time 145
25. Sarmanov, O. V. On One Method of Investigating Stationary Markov Processes 149

Transactions of the 6th Conf. on Probability Theory and Mathematical Statistics and of the Symposium on Distributions in Infinite-Dimensional Spaces held in Vil'nyus, 5-10 Sep '60. Vil'nyus Gospolitizdat Lit SSR, 1962. 493 p. 2500 copies printed

BLAGOVESHCHENSKIY, Yu.N.

Concerning the effectiveness of the Monte-Carlo method in some problems. Vop. teor. mat. mash. no.2:191-197 '62. (MIRA 15:8)
(Mathematical statistics)

S/052/62/007/002/001/005
C111/C222

AUTHOR: Blagoveshchenskiy, Yu.N.

TITLE: Diffusion processes depending on a small parameter

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya, v. 7, no. 2,
1962, 135 - 152

TEXT: The processes $\xi(t, \epsilon)$ satisfying the differential equation. ✓

$$\dot{\xi}(t, \epsilon) = a(t, \xi) + \epsilon B(t, \xi) \dot{B}(t) \quad , \quad (1)$$

where $\dot{B}(t)$ is the generalized derivative of a Wiener process $B(t)$ or the so-called white noise, are denoted as diffusion processes. The author investigates the asymptotic behavior of $\xi(t, \epsilon)$ on $t \in [0, T]$, $T < \infty$, for $\epsilon \rightarrow 0$. Under certain assumptions on the smoothness of the coefficients $a(t, x)$ and $B(t, x)$ an asymptotic expansion of $\xi(t, x)$ in terms of ϵ -powers is given :

Card 1/3

Diffusion processes depending on a ... S/052/62/007/002/001/005
C111/C222

$$\xi(t, \epsilon) = \eta_0(t) + \epsilon \eta_1(t) + \dots + \epsilon^m \eta_m(t) + \epsilon^{m+1} \gamma_{m+1}(t, \epsilon) \quad (13')$$

where for the remainder term the estimation

$$\sup_{\substack{t \in [0, T] \\ \epsilon \in [0, \epsilon_0]}} |\gamma_{m+1}(t, \epsilon)| < \infty \quad (14)$$

or the estimation

$$M \left\{ \sup_{t \in [0, T]} |\gamma_{m+1}(t, \epsilon)|^2 \right\} \leq K < \infty \quad (15)$$

holds with probability 1. Furthermore it is shown that $\xi(t, \epsilon)$ is a Markov and Gauss process in first approximation, while $\eta_k(t)$ for $k \geq 2$ is in general no longer Markov. On the other hand, the random vector $(\eta_1(t), \eta_2(t), \dots, \eta_k(t))$ is a Markov diffusion process, the total moments of which exist, are unique and finite. All results obtained for

Card 2/3

Diffusion processes depending on ...

S/052/62/007/002/001/005
C111/C222

(1) are generalized to processes for which the diffusion vanishes only partially for $\epsilon \rightarrow 0$ and which therefore satisfy the differential equation

$$\xi(t, \epsilon) = a(t, \xi) + [B(t, \xi) + \epsilon C(t, \xi)] \dot{B}(t) \quad (2) \quad \downarrow$$

Finally, the author carries out a generalization of the results to n-dimensional processes of the considered kind.

SUBMITTED: May 20, 1960

Card 3/3

BLAGOVESHCHENSKIY, Yu.N.

Differential properties of trajectories of diffusion processes depending on the parameters, and Cauchy's problem for degenerate parabolic equations. Dokl. AN SSSR 152 no.5:1027-1030 0 '63.
(MIRA 16:12)

1. Predstavleno akademikom A.N.Kolmogorovym.

BLAGOVESHCHENSKIY, Yu.N. (Moscow)

The Cauchy problem for degenerate quasi-linear parabolic equations. *Tecr. verciat. i ee prim.* 9 no.2:378-382 '64 (MIRA 17:87)

VOLODIN, B.G.; GANIN, M.P.; DINER, I.Ya.; KOMAROV, L.B.;
SVESHNIKOV, A.A., zasl. deyatel' nauki i tekhniki RSFSR,
doktor tekhn. nauk, prof.; STAROBIN, K.B.; DONCHENKO, V.V.,
red.; BLAGOVESHCHENSKIY, Yu.N., red.

[Problems in probability theory, mathematical statistics,
and theory of functions of random variables] Sbornik za-
dach po teorii veroiatnostei, matematicheskoi statistike i
teorii sluchainykh funktsii. Moskva, Nauka, 1965. 632 p.
(MIRA 18:10)

BLAGOVESHCHENSK'KIY, Yu.V.

Certain approximations in conformal mapping. Nauk.sop.Kiev.un. 9 no.9:
73-78 '50. (Conformal mapping) (MLRA 9:10)

BLAGOVESHCHENSKIY, Yu. V.

"The Programing of Computing Machines," Report submitted at the Second All-Union Conference on Automatic Control Theory, Moscow, 1953

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DYATLOVITSKIY, Lev Isaakovich; VARVAK, P.M., prof., doktor tekhn.nauk, retsenzent; BLAGOVESHCHENSKIY, Yu.V., kand.tekhn.nauk, retsenzent; PYSHKIN, B.A., otv.red.; NEMENKO, L.A., red.izd-va; SHTUL'MAN, I.F., red.izd-va; ROZENTSVYIG, Ye.N., tekhn.red.

[Stresses in gravity dams on earth foundations] Napriazhenia v gravitatsionnykh plotinakh na neskali'nykh osnovaniyakh. Kiev, Izd-vo Akad.nauk USSR, 1959. 338 p. (MIRA 12:10)

1. Chlen-korrespondent AN USSR (for Pyshkin).
(Dams) (Strains and stresses)

KRYLOV, Nikolay Mitrofanovich, akademik, matematik [deceased]; MITROPOL'SKIY, Yu.A., prof., otv. red.; BOGOLYUBOV, N.N., akademik, glav. red.; BLA-
GOVESHCHENSKIY, Yu.V., kand. tekhn. nauk, red.; LYKOVA, O.B., red. izd-va;
SKIYAROVA, V.Ye., tekhn. red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh.
Kiev, Izd-vo Akad. nauk USSR. Vols. 1-3. 1961. (MIRA 14:10)

1. Chlen-korrespondent AN USSR (for Mitropol'skiy).
(Mathematics)

BLAGOVESHCHENSKIY, Y. V.

PHASE I BOOK EXPLOITATION

SOV/5421

Rabinovich, Zinoviy L'vovich, Yuriy Vladimirovich Blagoveshchenskiy, Rostislav Yakovlevich Chernyak, Anna Leonidovna Gladyshev, Ivan Timofeyevich Parkhomenko, Ivetta Petrovna Okulova, Lidiya Aleksandrovna Mayboroda, and Stanislav Sergeyevich Zabara.

Spetsializirovannaya elektronnyaya schetnaya mashina SESM (SESM Specialized Electronic Computing Machine) Kiev, Izd-vo AN UkrSSR, 1961. 144 p. 5,500 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainsskoy SSR. Vychislitel'nyy tsentr.

Resp. Ed.: V.M. Glushkov, Corresponding Member of the Academy of Sciences of the Ukrainian SSR; Ed. of Publishing House: I.V. Kisina; Tech. Ed.: A.M. Lisovets.

PURPOSE: This book is intended for personnel engaged in the design and operation of computing machines and also for specialists in related branches of science who are acquainted with the fundamentals of computing technique and computing mathematics.

Card 1/4

SESM Specialized Electronic Computing Machine

SOV/5421

COVERAGE: The book describes the SESM (specialized electronic computing machine), which is intended for the solution of systems of linear algebraic equations and the computation of correlation functions. The authors discuss the methods of linear algebra used in the machine, its operating principles and those of its assemblies, circuits, and components. The authors credit Academician S.A. Lebedev with the fundamental idea and outline for the machine. The book was prepared by a group of staff members of the Computing Center AS UkrSSR under the direction of Z.L. Rabinovich, Candidate of Technical Sciences, who also wrote Sections II, IV, VIII, and IX. Section I was written by Yu.V. Blagoveshchenskiy, Candidate of Physics and Mathematics; Sections III, V, and XI were written by R.Ya. Chernyak, Candidate of Technical Sciences; Sections IV, VIII, and X by I.T. Parkhomenko, Engineer; Sections IV and IX by A.L. Gladyshev, Engineer; Section VII by I.P. Okulova, Engineer; and Section VI by L.A. Mayboroda and S.S. Zabara, Engineers. The authors thank L.N. Dashevskiy, Candidate of Technical Sciences, and V.V. Kraynitskiy, S.B. Pogrebinskiy, Ye.Ye. Dedeshko, A.Z. Libman, and K.V. Golovko, Engineers. No personalities are mentioned. There are no references.

Card 2/4

SESM Specialized Electronic Computing Machine

SOV/5421

TABLE OF CONTENTS:

Preface	3
I. Solution of Problems of Linear Algebra on the SESM Machine	5
II. Construction Principles and Basic Characteristics of the SESM Machine	16
III. Block Diagram of the Machine. Sequence of Performance of Operations	34
IV. Standard General-Purpose Elements	44
V. Layout of the Input	58
VI. Setup of the Conversion of the Codes	63
VII. Magnetic-Drum Memory Unit	79

Card 3/4

SESM Specialized Electronic Computing Machine

SOV/5421

VIII. Arithmetical Layout

96

IX. Time Controls

118

X. Design of the Output and Printing

131

XI. Control Panel and Machine-Operation Control

138

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Card 4/4

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... BLAGOVES HCHENS'KY, Yu. V.

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D251/D304

16.6800 (1024, 1250, 1329, 1344)

AUTHOR: Blahovyeshchens'ky, Yu. V.

TITLE: Investigating errors of some linear operations

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Obchyslyuval'nyy tsentr. Zbirnyk prats' z obchyslyuval'noyi matematyky i tekhniky, v. 3, 1961, 94 - 96

TEXT: The author considers two series of numbers $x_1, x_2, \dots, x_n$ and $y_1, y_2, \dots, y_n$, from which the sum

$$S_n = \sum_{i=1}^n x_i y_i \quad (1)$$

is formed. The error of the sum S_n when x_i, y_i are m-valued binary numbers is considered. The probability that the error of S_n will not exceed h is quoted as

Card 1/2

Investigating errors of some ...

S/696/61/003/000/009/011
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$$P(h) = \frac{2}{\sqrt{\pi}} \int_0^H e^{-t^2} dt \quad (1)$$

where

$$H = \frac{\sqrt{6} h}{2 \sqrt{p(p+1)n}} \quad (2)$$

see A.N. Krylov (Ref. 1: Lektsii o priblizhennykh vychisleniyakh (Lessons on Approximate Computations), Gostekhizdat, 1954). The formula to be applied for the iteration process is

$$x_1 = f_1 + \sum_{k=1}^n a_{1k} x_k \quad (3)$$

[Abstractor's note: Symbols not explained]. It is stated that the error is composed of two parts - the error in the probability, and the error arising from the iteration process: $\Delta_{full} = \Delta_{iter} + \Delta_{prob}$. Some hints are given concerning application of these results to computer calculations. There are 2 Soviet-bloc references.

Card 2/2

GLUSHKOV, V.M., otv. red.; KUKHTENKO, A.I., sam. otv. red.;
BLAGOVESHCHANSKIY, Yu.V., red.; DORODNITSYN, A.A., red.;
YERSHOV, A.P., red.; LYAPUNOV, A.A., red.; MOSKALEV,
I.S., red.; PUKHOV, G.Ye., red.; ROSTUNOV, T.I., red.;
SAMOKHVALOV, K.G., red.; STOONII, A.A., red.; TIMOFEYEV,
B.B., red.; SHCHERBAN', A.N., red.; LETICHEVSKIY, A.A.,
red.; KAPITONOVA, Yu.V., red.; MEL'NIK, T.S., red.

[Problems of theoretical cybernetics] Voprosy teoretiche-
skoi kibernetiki. Kiev, Naukova dumka, 1965. 209 p.
(MIRA 18:9)

1. Akademiya nauk URSS, Kiev.

SHTOKALO, I.Z.; KALUZHININ, L.A.; BLAGOVESHCHENSKIY, Yu.V.; BOGOLYUBOV, A.N.

Vladimir Petrovich Vel'min, 1885- ; on his 80th birthday.
Ukt. mat. zhur. 17 no.5:137-138 '65.

(MIRA 18:12)

EXCERPTA MEDICA Sec 8 Vol 12/6 Neurology June 59

2804. DISTURBANCE OF OLFACTION IN TUMOURS OF THE POSTERIOR
CRANIAL FOSSA (Russian text) - Blagoveshchikova N. S. Moscow -
VESTN.OTO-RINO-LARYNG. 1958, 20/5 (68-72)

Disturbance of olfaction in tumours of the posterior cranial fossa occurred in 25% of cases; it was due to involvement of the gyrus hippocampi or to olfactory growths in the frontobasilar region. Loss and disturbance of olfaction developed in advanced stages of the disease. Unilateral disturbance of olfaction on the side of the disease process was observed most often in tumours of the cerebellopontine angle. Olfactory disorders occur in benign tumours of the cerebellum; very seldom are they noted in tumours of the pons varolii. (XI, 5, 8, 16)

CA

BLAGOVESTOV A.M.

4

Electric-heating furnace with glass resistance. R. S. Dvornik and A. M. Blagovestov. *Soviet Chem.* 7, No. 7, 8-10 (1969).—The furnace consisted essentially of a fireclay tank, filled with glass melt and having two electrodes set in the end walls. A contact galvanometer control switched the current on and off, depending on the temp. (and resistance) of the melt. If the melt is not readily available, the cullet can be heated to 900-1000° and then the current switched on. The glass compn. used was: SiO_2 72.8, Al_2O_3 4, CaO 8.7, and Na_2O 14.5%. As the destruction of refractories and electrodes progressed, the melt became richer in silica, but furnace operation was not noticeably affected. Uninterrupted life was 600-700 hrs. at 1250-1350°. The use of 2 or 3 magnetic starters instead of 1, would permit furnace adjustment instead of a complete shut-down. The furnace was designed for heating the necks of lab. flasks, but adaptation for other uses is possible. H. Z. Kamich

BCA

BLAGOVESTOV, A. M.

1608. A new electric furnace for the annealing of glass ware.—A. M. BLAGOVESTOV (Sov. Kross., 8, No. 11, 12, 1951). A patented electric annealing furnace is described. The principal advantage is that the annealing schedule is almost independent of the thickness of the ware annealed. It is thought possible that this is due to the existence of an alternating magnetic field causing a vibration of the whole installation. The power consumption with this furnace is 160–170 kWh/24 hr. compared with the average figure in Russia of c. 450 kWh. (3 figs.)

BLAGOVESTOV, B.K., glavnyy inzhener

Sustained efforts for technological progress. Leg.prom.15 no.7:
7-9 J1'55. (MIRA 8:10)

(Shoe industry)

BLAGOVESTOV, B.K.; KHANIN, N.M., rukovoditel' laboratorii normirovaniya
materialov.

Careful use of raw materials for footwear manufacture. Leg.prom.
16 no.2:3-7 F '56. (MIRA 9:7)

1.Glavnyy inzhener fabriki "Skorokhod" (for Blagovestov).
(Shoe industry)

BLAGOVESTOV, B.K.

ALEKSEYENKO, V.I.; ~~BLAGOVESTOV, B.K.~~; BUGOSLAVSKAYA, L.A.; ZHUVIKINA, A.I.;
ZAKHARCHENKO, P.I.; MISHUSTIN, I.U.; NISNEVICH, Ye.A.

Use of synthetic gutta-percha in the shoe industry. Leg. prom. 17
no.6:18-20 Je '57. (MIRA 10:8)
(Shoe industry) (Gutta-percha)

SHVARTS, A.S., kand.tekhn.nauk; BLAGOVESTOV, B.K., inzh.

Organisation of exemplary workshops in Leningrad shoe
factories. Kosh.-obuv.prom. no.10:1-2 0 '59. (MIRA 13:2)
(Leningrad--Shoe industry)

L 35554-65 EWT(1)/EWA(h) Pob GW
ACCESSION NO: AP000209

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S/0286/65/000/005/0075/0076

AUTHORS: Mangolov, N. V.; Dondoshanskiy, L. K.; Fedorenko, A. N.; Pavlov, S. L.; ~~Mikhailov, N. A.~~; ~~...~~ L. V.; ~~...~~ V. A.

TITLE: A device for multichannel magnetic record of seismic waves, Class 42, No. 168899

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 75-76

TOPIC TAGS: seismic wave, magnetic recording

ABSTRACT: This Author Certificate presents a device for multichannel record of seismic waves based on Author Certificate No. 90068. It is distinguished by improved automation of seismic-station control. A step-type selector is used as the commutator, one sliding brush of which is connected to the intake of the rerecording amplifier, the other to the intake of the mixing circuit. The printing device for making time marks has the form of a geared drum, each tenth gear elongated, fastened on rotating brackets that are connected through a tie rod to a handle equipped with a stop. For matching a long time mark with shot time, the axis of the rerecording drum has a freely rotating lever arm, one end of which is equipped with a notch into which a lug corresponding to the tenth,

Card 1/2

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ACCESSION NR: AP5008209

elongated gear of the printing mechanism fits. To maintain strictly constant velocity and diminution in electrical power requirements, a dual supply electrical motor is used with a drum rotating in one direction, the AC winding of which is connected to a tuning-fork oscillator through a frequency and phase comparison circuit. This circuit is equipped with a relay safety link to protect the tuning fork from overloading, connected between the output of the tuning-fork oscillator and the winding of the electrical motor. To obtain a wide selection of directivity characteristics of seismic-control channels and to improve directional reception, a mixer is used that has a variable number of channels and decoupling elements with vector impedance proportional to the total vector impedance of the magnetic head and the instrumental resistance between the intake of the rerecording amplifier and the magnetic heads. This should report a weak signal. In using two-resonance rerecording, the frame of the device is connected to a regulating lever, the end of which is attached to a roller for keeping constant pressure of the pen on the paper.

ASSOCIATION: none

SUBMITTED: 24Dec59

ENCL: 00

SUB CODE: ES, DF

NO REF SOV: 000

OTHER: 000

Cord 2/2

C A

The histidine test in urine of hypophyseal patients.
N. F. Blagovestova. *Problemy Endocrinol.* (U.S.S.R.) 4,
No. 2, 82-8(1939).—Qual. tests were made for histidine in
urine of patients with hypophyseal disorders and with other
endocrine disorders and of a small group of healthy sub-
jects. This test produced unreliable results. In some in-
stances pos. tests were obtained in urine from practically
healthy subjects. Pos. results in the urine of patients af-
fected with hyperfunction of hypophysis were not more
prevalent than those of other endocrinopathies. It is con-
cluded that the histidine test proposed by Kapeller-Auer
for the diagnosis of pregnancy cannot be used as a diagnos-
tic test for the hyperfunction of hypophysis. W. R. H.

Ca	Carbohydrate metabolism of patients with defective functions of the anterior lobe of the hypophysis. N. P. Blagovestova. <i>Problemy Endokrinol.</i> (U. S. S. R.) 5, No. 2, 80-90 (1940).—B. investigated 144 persons with diseases of the anterior lobe of the hypophysis: 75 with acromegalia cases, 18 with Cushing's disease, 50 hypophyseal dwarfs and 1 with Simmonds' disease. In hypophyseal diabetes the sensitivity of the patients to carbohydrates is low. This is shown by the slow rise of the glucose curve and by the absence of the increase of sugar in urine after feeding sugar. In most cases hypophase is present after sugar feeding. The sensitivity to insulin is low, as shown by the slow decrease of blood sugar in feeding sugar with insulin and by the absence of a decrease of urine sugar from insulin treatments. Blood sugar in manism is between 80 and 90 mg. %. In some cases it is below 80 mg. % (80, 88 and 37 mg. %). Blood sugar in subnanism also tends to be low, but does not reach the low values of nanism. In nanism there are a strong reaction to carbohydrates, a sharp rise of the curve and a normal hypophase. The glucose curves in subnanism are normal. In general, in hypophyseal dwarfs the blood sugar on an empty stomach in most cases is at the lower limit of normal and in some cases below normal. In Simmonds' disease the blood sugar on an empty stomach is normal (90, 78 and 87 mg. %). The glucose curve exhibits a slow rise and no hypophase is present. A sugar feeding with insulin (5 units) produced no rise of the curve and a weakly defined drop. In Cushing's disease 3 out of 18 patients had a slight and variable glucosuria and 1 had a more defined glucosuria (2.3%). The blood sugar (except in 1 case) was normal, but had a tendency to higher values. The hypophase was normal. The changes of carbohydrate metabolism in Cushing's disease can be of the character of hypophyseal diabetes (analogous to acromegalic diabetes), pancreatic diabetes and adrenal diabetes. 36 references. W. R. Henn	116
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COMMON ELEMENTS		PROCESSING AND PROPERTY NOTES		CLASSIFICATION	
Glucose curves in functional disorders of suprarenal glands. N. P. Rukovistova and Z. M. Snyatinovskaya. <i>Problemy Endokrinologii</i> (U. S. S. R.) 5, No. 4, 95-102 (1940).—The state of carbohydrate metabolism in Addison's disease corresponds to that of exptl. animals after adrenalectomy. Changes in carbohydrate metabolism in hyperfunction of the adrenal cortex are sometimes opposite to those in Addison's disease. Forty-four cases of Addison's disease and 18 cases of hyperfunction of the adrenal glands were investigated. Blood sugar in most of the cases of Addison's disease was between 70 and 90 mg. %; blood sugar above 100 mg. % was found in only 3 cases and below 70 mg. % in 6 cases. In most cases of Addison's disease the changes of carbohydrate metabolism correspond to the severity of the general clinical condition. Destruction of the medullary layer in animals does not change the blood-sugar content and the removal of the adrenal cortex decreases the sugar content. Administration of adrenaline to adrenalectomized animals increases slightly the blood sugar and the administration of adrenal cortex ext. restores the sugar content to the normal level. Administration of adrenaline in Addison's disease does not improve the condition, while the administration of cortin has a favorable effect. In some cases of hyperplasia of the adrenal cortex there are observed changes in the carbohydrate metabolism which are opposite to those observed in Addison's disease. These facts indicate that the carbohydrate metabolism in Addison's disease is disrupted not only by the insufficiency of adrenaline but also by the lack of the adrenal-cortex hormones. Eleven references. W. R. Henn		11A		ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION	
100000 100000		100000 100000		100000 100000	

Erythrocyte regeneration in high mountains. Formation of leuco dyes under the influence of radiant energy.

G. G. Gasenko and N. P. Blagovestova. *Bull. biol. med. expil. U. S. S. R.*, 130-2(1940); *Cibow. Zentr.* 1941, I, 1184.—Supra-vital smears, used for detg. blood regeneration in high altitudes, were rendered unusable in snow-covered mountains, because radiation converted the dyes used for staining the reticulo-filamentous substance into leuco bases. In all cases of reversible transformation into the leuco form, the multiplied reticulocytes were made visible by adding Giemsa's stain. Similar results were obtained at times by oxidizing processes which restored the leuco form to the colored form. In such cases an apparent increase in reticulocytes was observed after exposing the smear to air. No production of the leuco form could be observed under the influence of ultraviolet radiation. M. Hoesch

116	
<i>Ca</i> COMMON ELEMENTS COMMON VARIANTS	PROCESSED AND PROPERTIES INDEX The salt composition of blood in disturbances of the function of suprarenal glands. N. P. Blagovestova. <i>Problemy Endocrinol.</i> (U. S. S. R.) 6, No. 1, 123 (1941). The salt compn. of blood in 23 cases of Addison's disease deviated greatly from the normal. K in most cases was above normal (up to 27.4 mg. %), in the remaining cases it was near the upper limit (23 mg. %). Na in all but 3 cases was below normal (as low as 138 mg. %). Ca was above normal in 2 cases (11.4 mg. %), normal in the rest. Cl was below normal in all cases (as low as 217 mg. %). The alk. reserve in half of the cases was low (in one case it was 28.1). The content of Cl in urine was in most cases below normal (as low as 8.2 mg. %). The ratio Na/K in all cases was considerably below normal (as low as 0.2). The K/Ca ratio was high in most cases (above 2.3). In nearly all cases there were observed dislocations of the ionic compn. of the plasma, but the degree of these changes does not necessarily correspond to the severity of the case. No connection was observed between the changes of the salt compn. of the blood and the individual clinical data (blood pressure, pigmentation, intestinal disturbances and the duration of the disease). Treatments with cortin and NaCl produced no definite changes in the salt compn. of the blood. Eight patients with hypernephroma and virilism showed no symptoms opposite to those in Addison's disease, as found by McQuarrie. The changes of the salt compn. of blood in Addison's disease are fairly const. and characteristic and they can be used for diagnostic tests. Fifteen references. W. R. Hens ASD-51A METALLURGICAL LITERATURE CLASSIFICATION FROM SYMBOL - FROM SYMBOL FROM SYMBOL
SYMBOLS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	SYMBOLS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

STUHLHOFER, M.; BLAGOVIC, S.

A new cardiotomy apparatus used in conjunction with extra-corporeal circulation with the Lillehei-Dewall oxygenator. Acta chir. Jugosl. 11 no.1:28-33 0 '64.

1. Kirurški odjel Opće bolnice Dr. M. Novosel (Predstojnik prim. dr B. Oberhofer) i Kirurške klinike Veterinarskog fakulteta (Predstojnik prof. dr E. Vukelic) u Zagrebu.

YUGOSLAVIA

STULHOFER, Dr. Mladen; SLIJEPCEVIC, Dr. Sinisa and BLAGOVIC, Dr. Stjepan;
Department of Surgery, General Hospital (Kirurški odeljenje bolnice),
"Dr. O. Novosel"; and Surgical Clinic, Veterinary College (Kirurška
klinika Veterinarskog fakulteta), Zagreb.

"Internal Juxtacardial Electrical Stimulation of the Heart."

Zagreb, Liječnički Vjesnik, Vol 87, No 10, Oct 1965; pp 1079-1082.

Abstract [English summary modified]: Experiments on 10 dogs revealed that myocardial implantation of electrodes is not essential but that epicardial placement suffices, provided the electrode is placed in direct opposition to the ventricle; the anode can be left extrapleurally. Table, 4 electrocardiograms, 2 Yugoslav, and 8 Western references. Manuscript received 10 Jul 64.

BLAGOVIDOV, D. F.

Blagovidov, D. F.: "The condition of chemical factors of nerve stimulation in human organisms in the presence of ulcers," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 105-112

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

BLAGOVIDOV, D. F.

Blagovidov, D. F.: "Intestinal anastomosis 'end to end' with the use of fixation sutures," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 267-271

SO: U-5240, 17 Dec. 54, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

BLAGOVIDOV, D. F.

Blagovidov, D. F.: "A case of atresia of the anus in a 3-day old child in combination with an external fistula of the penis cured by proctoplasty," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 315-318

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

MIKHAYLOV, V.K.; SMETANIN, B.F.; BLAGOVIDOV, D.F.

I.V.Domrachev. Khirurgiia, Moskva, No. 4:78-80 Ap '50.(GML 19:2)

BLAGOVIDOV, D.F., dotsent, kandidat meditsinskikh nauk

Preliminary results of the use of novocaine block of the splanchnic nerves in acute peritonitis. Khirurgia no.2:25-29 F '55.(MIRA 8:5)

1. Klinika neotlozhnoy khirurgii (sav. dotsent V.M.Osipovskiy)
Kazanskogo gosudarstvennogo instituta usovershenstvovaniya vrachey.

(PROCAINE, therapeutic use,
peritonitis, block of splanchnic nerve)
(ANESTHESIA, REGIONAL,
splanchnic nerve procaine block in peritonitis)
(PERITONITIS, therapy,
procaine block of splanchnic nerve)

BLAGOVIDOV, D.F., dots.

Observations on surgery in the Mongolian People's Republic.
Khirurgia 35 no.2:121-123 F '59. (MIRA 12:5)
(SURGERY,
in Mongolia (Rus))

BLAGOVIDOV, D.F., dotsent

Acute combined diseases of abdominal cavity organs. Kaz. med. zhur.
41 no.3:35-39 My-Je '60. (MIRA 13:9)

1. Iz 2-y kliniki khirurgii (zav. - prof. P.V.Kravchenko) Kazanskogo
gosudarstvennogo instituta dlya usovershenstvovaniya vrachey im.
V.I. Lenina.

(ABDOMEN—DISEASES)

BLAGOVIDOV, D.F.; YOSHCHANOVA, N.P. (Moskva)

Cases of retroperitoneal phlegmons. Khirurgia 37 no.3:108-110
Mr '61. (MIRA 14:3)
(RETROPERITONEAL SPACE—DISEASES) (PHLEGMON)

BLAGOVIDOV, D.F.; POMEL'TSOV, A.N.; FINK, A.S.; ANDRUSHCHENKO, Ye.S.

~~Experimental sclerosing pancreatitis caused by punctate thermo-~~
coagulation. Eksper. khir. i anest. 9 no.6:38-41 N-D '64.

(MIRA 18:7)

1. Patofiziologicheskaya laboratoriya Tsentral'noy klinicheskoy
bol'nitsy (glavnyy vrach - A.I.Khrumlyan), 1.-ya bol'nitsa (glavnyy
vrach - dotsent V.G.Bezzubik) 4-go glavnogo upravleniya pri Mini-
sterstve zdravookhraneniya SSSR i Otdel patologicheskoy anatomii
(zav. - prof. D.S.Sarkisov) Instituta khirurgii imeni A.V.Vishnev-
skogo (direktor - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnev-
skiy) AMN SSSR, Moskva.

COMMON ELEMENTS										COMMON VARIABLE INDEX									
1ST AND 2ND ORDER										3RD AND 4TH ORDER									
22 Subjecting crude oils to a preliminary alkali treatment. A. B. Terteryan and I. F. Hingvridov. <i>Azerbaidzhan'skie Neftyanoe Khimicheskie</i> 1935, No. 4, 46-50.—A com- scale treatment of crude oils with alkalis is feasible if carried out in continuous app. In a periodical treatment of heavy crude-oil emulsions, losses up to 50% may occur. More naphthenic acids are recovered in the preliminary treatment than after or during the usual refining. The lubricating-oil fractions can be refined more easily when naphthenic acids are extd. before distn. A. A. B.																			
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1ST AND 2ND COPIES

PROCESSES AND PROPERTIES INDEX

18D AND 4TH COPIES

22

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The extraction and utilization of naphthenic acids.
 I. E. Muzuridze and A. B. Terteryan. *Asvbidzhnitsa*
Nefteva Khimiches 1955, No. 11-12, 138-141. The
 yields of naphthenic acids from Balakhanov lubricating
 oil distillates and from the heavy Balakhanov crude oil
 are, resp.: gasoline traces, kerosene 0.83, 0.69, light
 gas oil 1.84, 1.60, heavy gas oil 1.65, 2.48, spindle oil
 1.67, 2.08, machine oil 1.16, 2.08 and cylinder oil 0.82,
 1.90%. A variety of processes for the separation of soaps
 from the mineral oil present in the alkali sludge are dis-
 cussed. Good results were obtained when kerosene acid
 sludge was added to emulsions formed with alkalis and
 higher-boiling fractions. The preparation of the acid oil
 and acid-oil petroleum waxes is discussed. A. A. B.

ASB-SEA METALLURGICAL LITERATURE CLASSIFICATION

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1024 No. 6, 62-4.—Heat-t. test data are compared for Gager atmospheric and vacuum furnaces, Also vacuum furnaces, Foster-Wheeler furnaces and Nerovny furnaces. The Gager furnace is best adapted for Russian conditions. provided a few modifications are made. A. A. B.

1024 No. 6, 62-4.—Heat-t. test data are compared for Gager atmospheric and vacuum furnaces, Also vacuum furnaces, Foster-Wheeler furnaces and Nerovny furnaces. The Gager furnace is best adapted for Russian conditions. provided a few modifications are made. A. A. B.

BLAGOVIDOV, I.F.; SPETTOR, Sh.Sh.; UDALYY, A.M., vedushchiy redaktor;
VOLOKH, S.M., professor redaktor; ISMAYLOV, R.G., dotsent,
redaktor

[Operation of oil refineries] Eksploatatsiia neftepererabatyvaiu-
shchikh zavodov. Pod red. S.M.Volokha i R.G.Ismailova. Baku, Gos.
nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, Azerbai-
dzhanskoe otd-nie, 1951. 199 p. [Microfilm] (MLRA 7:10)
(Petroleum--Refining)

BLAGOVIDOV, I. F. and SPEKTOR, Sh. Sh

"Fight Against Losses of Petroleum Products at Oil Refineries," Baku, Azer. Branch
of Gostoptekhnizdat, pp 190-195, 1951

Translation of the above named chapter from the book "Operation of Oil Refineries,"
D 257880, 27 Jun 55

BLAGOVIDOV, Igor' Fedorovich
PHASE I BOOK EXPLOITATION

275

Blagovidov, Igor' Fedorovich, Sulimov, Andrey Dmitriyevich

Sovremennyye metody polucheniya topliv iz nefti; v pomoshch' lektoru (Modern
Methods of Obtaining Fuel from Petroleum; Guide for the Lecturer) Moscow,
Gostoptekhizdat, 1957. 42 p. (Novaya tekhnika neftyanoy promyshlennosti)
2,000 copies printed.

SPONSORING

AGENCY:

Nauchno-tekhnicheskoye obshchestvo neftyanoy promyshlennosti.

Ed.:

Lozbyakova, Ye. S.; Tech. Ed.: Mukhina, E. A.

PURPOSE:

This booklet is intended for the use of lecturers in modern technology
and for engineers and specialists in all branches of the petroleum
and chemical industries and in related enterprises.

COVERAGE:

The authors describe present day methods of obtaining fuel from petro-
leum. They discuss hydrodesulfurization processes -- hydrofining
and automated hydrofining; catalytic reforming processes;

Card 1/3

Modern Methods of Obtaining Fuel from Petroleum (Cont.)

275

catalytic cracking with pellet (bead) or powdered catalysts; the treatment of petroleum residue to increase the yield of light petroleum product separation -- coking in units which are not externally heated, and coking with granulated coke. Flow sheets and the principal characteristics of these processes, along with flow sheets of modern plants which process sulfurous crudes, are given. There are 90 references of which 35 are Soviet, 48 English, 7 German.

TABLE OF CONTENTS:

I. Introduction	3
II. A Short Description of the Principal Flow Sheets of Modern Refineries Processing Sulfurous Crudes	6
Bibliography	13
III. Hydrodesulfurization Processes	13
Bibliography	21

Card 2/3

Modern Methods of Obtaining Fuel from Petroleum (Cont.)	275
IV. Catalytic Reforming Processes	22
Bibliography	28
V. Catalytic Cracking Processes	29
Bibliography	33
VI. Coking Processes	35
Bibliography	42

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Card 3/3

BK/gmp
May 26, 1958

BLAGOVIDOV, I.F.

BLAGOVIDOV, I.F.; POTOLOVSKIY, L.A.; DOLADUGIN, A.I.

Manufacture of alkylaryl sulfonates (sulfonol-np) from
propylene polymers. Khim. i tekhn. topl. i masel no.8:4-13
Ag '57. (MIRA 10:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i gaza i polucheniya iskusstvennogo shidkogo topliva.
(Sulfonic acids) (Propene) (Cleaning compounds)

Blagovidov I.P.

BLAGOVIDOV, I.P.; PROSKURYAKOVA, L.B.

Development of scientific research in the petroleum refining industry during the forty years of Soviet power. Khim. i tekhn. topl. i masel no.11:13-19 N '57. (MIRA 11:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniya iskusstvennogo zhidkogo topliva.
(Petroleum research--History)

SOV/65-88-6-7/13

AUTHORS: Potolovskiy, L. A; Blagovidov, I. F; Kestikin, L. I.

TITLE: The Synthesis of Na-Isodecylbenzene Sulphonate (Sulphanole NP-2) on the Basis of Amylene Dimers. (Sintez izodetsil-benzolsul'fonata natriya (sul'fonola NP-2) na osnove dimerov amilenov).

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr.6. pp. 33 - 41 (USSR).

ABSTRACT: The alkylation of benzene with amylene dimers when using sulphuric acid and aluminium chloride as catalyst, and also the conditions for sulphonating isodecylbenzenes with oleum, neutralisation of alkylbenzene sulphonic acids and the physico-chemical properties of sodium alkylbenzene sulphonates and their activity as detergents was investigated. During the alkylation, the fractions boiling between 120° - 180°C (Refs. 8, 9, and 10) of various samples of technical diisocamylenes (Ref.2) were used. These were obtained by polymerising pentane-amylene fractions of cracking products in an industrial polymerising unit of the GrozNII Cracking Plant. The physico-chemical properties of the fractions are listed. The composition and structure of the olefins was defined by infra-red spectral analysis (Table 1); purified aluminium chloride GOST 4452-48) and sulphuric acid were used as catalysts.

Card 1/4

SOV65-58-6-7/13

The Synthesis of Na Isodecylbenzene Sulphonate (Sulphanok NP-2)
on the Basis of Amylene Dimers.

The optimal molar ratio of C_6H_6 : iso- $C_{10}H_{20}$ was found to be 7.0 - 7.5 (Fig.1). The yield of the fraction 212° - 320°C was 112%; the optimal quantity of aluminium chloride catalyst was 0.1 mol - 7.5 mol of diisoamylenes, and the optimum reaction temperature = 30°C (Fig.2). The yield of various fractions is given. When using diisoamylenes containing 0.89% of sulphur compounds the yield of the fraction 212° - 280°C was 61%, and the alkylation product had a high bromine number (15). The reaction was carried out at 5° - 7° and 18° - 20° when sulphuric acid was used as catalyst (Table 2). Yields were 98.1% and 79.2% respectively. The influence of the amount of acid on the yield of alkylbenzenes and on the bromine number of fractions 180° - 350°C during alkylation with sulphuric acid at 15° - 17°C (Fig. 3). The highest yield of isodecylbenzenes was obtained when 96% - 98% sulphuric acid was used. In this case the yield = 98.1%. It was found that when using H_2SO_4 a lower yield of alkylbenzene fraction and a higher bromine number was obtained than when using $AlCl_3$. Results of infra-red spectral analyses of the alkylbenzene fractions are given in Table 3. The tests

Card 2/4

SOV/ 85-58-6-7/13

The Synthesis of Na Isodecylbenzene Sulphonate (Sulphanole NP-2)
on the Basis of Amylene Dimers.

on the sulphonation of isodecylbenzenes with oleum and neutralisation of the sulphonic acids were carried out at 35° - 40°C while adding oleum for 20 - 30 minutes, and subsequent mixing for 120 minutes. The sulphonic acids were neutralised with a 25% - 30% solution of NaOH, the temperature of neutralisation did not exceed 45° - 50°C. Fig.4: the quantity of oleum necessary for sulphonating the fraction 212° - 320°C of isodecylbenzenes depending on the content of SO₃ in oleum. Industrial experiments carried out in the plant VNII NP confirm the data obtained during laboratory tests. The physico-chemical properties of Na isodecylbenzene sulphonate were determined in VNII NP and in Leningrad in the All-Union Research Institute for Oils and Fats (VNIIZh) (Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (VNIIZh)) (Ref.13). Test results are given in Tables 4 and 5. The deterative action of isodecylbenzene sulphonates in hard water at 40°C and at 0.25% concentration of the active substance was compared with the deterative action of soap under identical conditions (Table 6). It was found that Sulphanole NP-2 could be used as detergent. Its deterative properties

Card 3/4

SOV/ 65-58-6-7/13

The Synthesis of Na Isodecylbenzene Sulphonate (Sulphanole NP-2)
On the Basis of Amylene Dimers.

in the pure form, at 0.25 concentration in the solution
= 111% compared with the detergent properties of soap
and 246% when mixed with 50% sodium carbonate. Sulphanole
NP-2, prepared with $AlCl_3$, has much higher detergent
properties than Sulphanole NP-2, prepared with H_2SO_4 .
Analogous results were obtained by the Central Research
Institutes TSNIIshersti and TSNIIshelka. There are 6
Tables, 4 Figures, 13 References: 4 English, 8 Soviet,
1 German

ASSOCIATION:VNII NP

Card 4/4

BLAGOVIDOV, I.F.

Intorduction. Trudy VMII MP no.7:3-7 '58. (MIRA 12:10)
(Lubrication and lubricants) (Paraffins)

BLAGOVIDOV, I.F.

Continuously introducing the latest innovations to the
petroleum refining industry. Khim.i tekhn.topl.i masel 7
no.5:1-4 My '62. (MIRA 15:11)
(Petroleum refineries--Equipment and supplies)

VORONOV, Nikolay Mikhaylovich; BLIDCHENKO, Ignatiy Fedorovich;
GONCHAROV, Viktor Mikhaylovich; LOBANOV, Vasil'y Vasil'yevich;
MERKUR'YEV, Gennadiy Dmitriyevich; BLAGOVIDOV, I.F., kand.
tekhn. nauk, retsenzent; GROMOV, G.N., inzh., retsenzent;
EMINOV, Ye.A., inzh., retsenzent; LOSIKOV, B.V., prof., red.;
SOBAKIN, V.V., inzh., retsenzent; MEDVEDEVA, M.A., tekhn.
red.

[Fuel oil and lubricating materials in railroad transportation]
Nef'tianoe toplivo i smazochnye materialy na zheleznodorozhnom
transporte; spravochnik. [By] N.M.Voronov i dr. Moskva, Trans-
zheldorizdat, 1962. 322p. (MIRA 15:9)
(Railroads--Fuel) (Railroads--Lubrication)
(Petroleum products)

VORONOV, Nikolay Mikhaylovich; BLIDCHENKO, Ignatiy Fedorovich;
GONCHAROV, Viktor Mikhaylovich; LOBANOV, Vasilii
Vasil'yevich; MERKUR'YEV, Gennadiy Dmitriyevich;
BLAGOVIDOV, I.F., kand. tekhn. nauk, retsenzent; EMINOV,
Ye.A., inzh., retsenzent; GROMOV, G.N., inzh., retsenzent;
LOSIKOV, B.V., prof., red.; SOBAKIN, V.V., inzh., red.;
MEDVEDEVA, M.A., tekhn. red.

[Petroleum fuel and lubricants in railroad transportation;
handbook] Neftianoe toplivo i smazochnye materialy na
zheleznodorozhnom transporte; spravochnik. Moskva, Trans-
zheldorizdat, 1962. 322 p. (MIRA 16:6)
(Petroleum products) (Railroads--Fuel)

BLAGOVIDOV, I.F., KREYN, S.E., SEMENIDO, YE.G., PUCHKOV, N.G., ZASLAVSKIY, YU.S.

Investigation of motor oil performance and methods of evaluation

Report to be submitted for the Sixth World Petroleum Congress,
Frankfurt, 16-26 June 63

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72

AUTHOR: Blagovidov, I. F.; Borovaya, M. S.

TITLE: Effect of polymethylsiloxane liquids on motor oil properties

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1963, 52-57

TOPIC TAGS: polymethylsiloxane, motor oil properties, multigrade oil additives, polymerization, condensation products, oil oxidation, alkylphenol, sulfonate, alkyl salicylate detergent additives, sludge formation

ABSTRACT: A series of multigrade oil additive packages containing 0.003-0.005% PMS-200A polymethylsiloxane liquid, developed at VNII NP, has been found equal and in some cases superior to the best foreign additives. The silicone, besides its antifoam characteristics, also reduces the formation of polymerization and condensation products during oxidation of oil containing alkylphenol, sulfonate, and alkyl salicylate detergent additives at 200-260C. The salicylate additive not only reduces sludge formation, like the others, but also lessens the viscosity increase of the oxidized oil. The silicone enhances this effect. Orig. art. has: 5 figures and 3 tables.

Card 1/2/

BLAGOVIDOV, I.F.; DERYABIN, A.A.; PUCHKOV, N.G.

Classification of lubricating oils for internal combustion engines.
Khim.i tekhn.topl.i masel 8 no.2:37-43 F '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i gazov i polucheniya iskusstvennogo zhidkogo topliva.

BLAGOVIDOV, I.F.; BOROVAYA, M.S.; DRUZHININA, A.V.; DERYABIN, A.A.;
ZASLAVSKIY, Yu.S.; MONASTYRSKIY, V.M.; PUCHKOV, N.G.;
FILIPPOV, V.F.

Selecting additives to oils for various uses. Khim. i tekhn.
topl. i masel. 8 no.3:54-62 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i gasov i polucheniya iskusstvennogo zhidkogo topliva.

(Lubrication and lubricants—Additives)

POTOLOVSKIY, L.A.; DOLADUGIN, A.I.; BLAGOVIDOV, I.F.

Synthesizing sodium alkylbenzene sulfonate (sulfonol NP-1)
on a base of propylene polymers. Trudy VNII NP no. 9:110-170
'63. (MIRA 17s6)

BLAGOVIDOV, I.F.; BASOV, A.N.

Prospects for the development of the petroleum refining industry and its contribution to the growth of a large-scale petrochemical industry. Khim. i tekhn. topl. i masel 8 no.4: 1-5 Ap '63. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefiti i gasov i polucheniyu iskusstvennogo zhidkogo topliva.

(Petroleum--Refining)
(Petroleum industry)